



Time Path Path Number of Estimated June 2001
Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

WISCONSIN, Southeast

| WIZ046>047-056>057- |
|---------------------|
| 062>063-068 |

Marquette - Green Lake - Sauk - Columbia - Iowa - Dane - Green

07 1730CST 08 0100CST 0

Fog

Very dense fog developed during the early evening across parts of south-central Wisconsin, but broke up before sunrise the next day. Visibilities were reduced to 1/16 to 1/4 mile. About a dozen vehicle accidents were noted in local newspapers, and several airplane flights were delayed at area airports. The very dense fog was the result of radiational cooling, clear skies, and light and variable winds. Surface dewpoints were in the 50 to 55 degree range.

| Marquette County 5 W Westfield to Packwaukee | 11 | 1950CST 2010CST | | | 0 | 0 | 15K | Thunderstorm Wind $\left(G55\right)^{M}$ |
|--|----|--------------------|-----|----|---|---|------|--|
| Green Lake County 2 SSW Marquette | 11 | 2000CST 2001CST | 0.2 | 30 | 0 | 0 | 100K | Tornado (F0) |

A brief, weak, tornado damaged one home, one barn, and uprooted several trees. This tornado was embedded in a solid line of thunderstorms, and apparently formed on the left side of a pronounced downburst on the leading edge of the line. On the Milwaukee-Sullivan WSR-88D, a mesocyclone and tornado-vortex signature were observed

| Sauk County Baraboo to Sauk City | 11 | 2009CST 2030CST | | | 0 | 0 | 25K | Thunderstorm Wind (G55) |
|---|----|--------------------|---|----|---|---|------|-------------------------|
| Fond Du Lac County Countywide | 11 | 2010CST 2045CST | | | 0 | 0 | 50K | Thunderstorm Wind (G55) |
| Green Lake County 3 NE Dalton | 11 | 2010CST | | | 0 | 0 | 100K | Thunderstorm Wind (G55) |
| Columbia County Pardeeville | 11 | 2013CST | | | 0 | 0 | 25K | Thunderstorm Wind (G61) |
| Dodge County 4 N Fox Lake to 4 E Fox Lake | 11 | 2013CST 2025CST | 8 | 75 | 0 | 0 | 700K | Tornado (F1) |

A tornado spun up 4 miles north of Fox Lake in northwest Dodge County, and moved southeast through the grounds of the Fox Lake State Correctional Institute, before dissipating 4 miles east of Fox Lake. At the Correctional Institute, the tornado bent several fence sections, cut off power, burst two water mains, and smashed windows in the recreation hall. Security guards reported a "lifting" force and "popping ears" as the tornado passed overhead. Northeast and east of Fox Lake, the tornado destroyed 2 barns, severely damaged a third barn, and damaged 1 home, 3 silos, and 2 pole sheds. Although the maximum path width was 75 yards, the average path width was closer to 40 yards.

| Milwaukee County Wauwatosa | 11 | 2024CST | | | 0 | 0 | 25K | Lightning |
|--|----|--------------------|-----|----|---|---|------|-------------------------|
| Dodge County 2 E Beaver Dam to 1 NNW Rubicon | 11 | 2025CST 2045CST | | | 0 | 0 | 200K | Thunderstorm Wind (G70) |
| Dane County Waunakee | 11 | 2035CST | | | 0 | 0 | 10K | Thunderstorm Wind (G55) |
| Sheboygan County Elkhart Lake to Cedar Grove | 11 | 2035CST 2058CST | | | 0 | 0 | 25K | Thunderstorm Wind (G70) |
| Dodge County 1 NNW Rubicon to 2 ESE Rubicon | 11 | 2045CST 2049CST | 2.9 | 50 | 0 | 0 | 25K | Tornado (F0) |

A weak (F0) tornado spun up 1 mile north/northwest of Rubicon in southeast Dodge County, and moved southeast before exiting the





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WISCONSIN, Southeast

county at a point 2 miles east/southeast of Rubicon. While in Dodge County, it pulled down or uprooted many trees. This tornado then moved through Washington County, giving a glancing blow to the city of Hartford. Associated winds were in the 52 to 61 knot range (60 to 70 mph).

Washington County
2.2 WNW Hartford to
1.4 SE Hartford

11 2049CST 3.4 75 0 0 400K Tornado (F1)

This tornado entered Washington County 2.2 miles west/northwest of Hartford, after spinning up just north/northwest of Rubicon in Dodge County. It traveled southeast and intensified to a F1 rating (winds about 78 to 87 knots, or 90 to 100 mph) as it cut across the southwest part of Hartford. This tornado inflicted minor damage on 250 homes, major damage to 5 homes, and minor damage to 3 businesses. Additional tornado-related costs, such as debris removal, protective measures, etc, amounted to \$102,100.

| Waukesha County Countywide | 11 | 2050CST 2120CST | 0 | 0 | 75K | Thunderstorm Wind $\left(G52\right)^{M}$ |
|-------------------------------|----|--------------------|---|---|-----|--|
| Ozaukee County | | *4.00 GGT | | | | |
| Countywide | 11 | 2100CST 2115CST | 0 | 0 | 75K | Thunderstorm Wind (G55) |
| Milwaukee County | | | | | | |
| Countywide | 11 | 2110CST 2130CST | 0 | 0 | 50K | Thunderstorm Wind (G61) ^M |
| Jefferson County | | | | | | |
| Lake Mills to Ft Atkinson | 11 | 2114CST 2120CST | 0 | 0 | 30K | Thunderstorm Wind (G56) |
| Washington County | | | | | | |
| Richfield to Germantown | 11 | 2116CST 2120CST | 0 | 0 | 10K | Thunderstorm Wind (G52) |
| Rock County | | | | | | |
| Countywide | 11 | 2125CST 2150CST | 0 | 0 | 50K | Thunderstorm Wind (G52) |
| Walworth County | | | | | | |
| East Troy | 11 | 2130CST | 0 | 0 | 25K | Thunderstorm Wind (G55) |
| Green County | | | | | | |
| Albany | 11 | 2134CST | 0 | 0 | 5K | Thunderstorm Wind (G52) |
| Kenosha County | | | | | | |
| Twin Lakes to Bristol | 11 | 2145CST 2200CST | 0 | 0 | 15K | Thunderstorm Wind (G52) |
| Racine County | | | | | | |
| Burlington to Racine | 11 | 2145CST 2200CST | 0 | 0 | 15K | Thunderstorm Wind (G54) ^M |
| Walworth County | | | | | | |
| Walworth | 11 | 2150CST | 0 | 0 | 5K | Thunderstorm Wind (G52) |

A powerful squall line plowed through most of south-central and southeast Wisconsin during the late evening hours of June 11, 2001, resulting in widespread damage to trees, power lines, and power poles. There were many reports of damage to residential homes, businesses, and motor vehicles, caused by falling trees/branches. Maximum wind gusts were in the 64 to 78 knot range (74 to 90 mph) in parts of Sheboygan, Dodge, and Washington counties, and 50 to 63 knots (58 to 73 mph) elsewhere. In addition, three (3) tornadoes formed in a meso low-pressure on the left side of a pronounced down-burst located on the leading edge of the squall line. One of the tornadoes, rated F0, briefly affected the area southwest of the village of Marquette (Green Lake Co.). Later on, the same meso-low-pressure/down-burst couplet generated a F1 tornado that affected the area north and east of Fox Lake (Dodge Co.). The last tornado (F1) spun up near Rubicon (Dodge Co.) and moved southeast into Washington County, giving the city of Waterford a glancing blow. Refer to individual narratives on these 3 tornadoes under the tornado events for June 11th. Significant county reports follow.

Marquette County: A tree fell on and damaged a home in Packwaukee. Near Westfield, ten (10) calf pens were destroyed. Green Lake County: A brief tornado (F0) damaged a home, barn, and several trees about 3 miles southwest of Marquette. In addition, near Dalton, two (2) barns were severely damaged by down-burst winds.





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WISCONSIN, Southeast

Fond du Lac County: a boat in the Fond du Lac harbor sustained wind damage

Sheboygan County: Hurricane-force winds over-turned a barn four (4) miles north of Beechwood.

Dodge County: A F1 tornado traveled from a point 4 miles north of Fox Lake to 4 miles east of Fox Lake. A tornado spun up near Rubicon and then moved southeast into Washington County just north of State Highway 60. Along its path in Dodge County, only F0 damage was observed. Elsewhere, in the village of Neosho, a residential home was damaged by felled trees. In a rural area near Hustisford, the roof of a home was partially ripped off and several farm outbuildings were damaged

Washington County: The tornado that spun up near Rubicon (Dodge Co.) intensified to a F1 rating as it moved southeast through the southwest part of Hartford, before dissipating southeast of the city. This tornado inflicted wind or tree damage to more than 250 residential homes and business.

Waukesha County: Down-burst winds pushed over a barn near the village of Lannon. Most of the tree and power-line damage was noted in the Oconomowoc to Waukesha area, and in the North Prairie to Eagle area

Milwaukee County: tree/power-line damage across much of county. Several cars sustained damaged from felled trees. Mitchell Field had a measured maximum wind gust of 60 knots (69 mph). Lightning struck a Wauwatosa home, resulting in a roof/attic fire.

As the squall line moved through south-central and southeast Wisconsin, heavy rains reduced visibilities to 100-200 feet at some locations. Total rainfall for the event was impressive, and exceeded 2 inches in some spots. West Allis (Milwaukee Co.) registered 2.70 inches, Watertown (Jefferson Co.) and Janesville (Rock Co.) measured 2.64 inches, Madison's Truax Field came in with 1.94 inches, and Milwaukee Mitchell Field recorded 1.75 inches. Most small streams reached near-bankfull stages, and the Fox River at New Munster, in western Kenosha County, eventually exceeded its 10 foot flood stage by 2.25 feet early at 0000CST on June 14, 2001.

The squall line was the tail extension of an intense bow-echo that struck the east-central Wisconsin counties of Waushara, Winnebago, Calumet, and Manitowoc with hurricane-force, down-burst winds. Twenty-four hours earlier, the bow-echo/squall line was a cluster of thunderstorms over eastern Montana. Synpotically, a warm front extended from central Minnesota to southwest Wisconsin to just south of Chicago. Aloft, a 500mb short-wave trough moved east across North Dakota and then moved southeast across Minnesota and Wisconsin. Strong warm-air advection between 850 and 700mb fueled the thunderstorm complex

| Iowa County Mineral Pt | 12 | 0142CST | 0 | 0 | Hail (0.75) |
|---------------------------------------|----|---------|---|---|-------------------------|
| Dodge County 2.5 WNW Danville | 12 | 0312CST | 0 | 0 | Hail (1.75) |
| Green County 3 E Monroe to 1 E Monroe | 12 | 0430CST | 0 | 0 | Thunderstorm Wind (G52) |

Isolated, pulse-type, severe thunderstorms popped up during the overnight hours across parts of south-central and southeast Wisconsin. The large hail near Danville (just east of the city of Columbus in Columbia Co.) covered the ground. Several large trees were toppled by powerful wind gusts (estimated at 52 knots, or 60 mph), just east of Monroe in Green County.

| Sauk County | | | | | | |
|--------------------------|-----|--------------------|---|---|------|-------------------------|
| Lake Delton | 14 | 1335CST 1340CST | 0 | 0 | | Thunderstorm Wind (G52) |
| Columbia County | | | | | | |
| Wisconsin Dells | 14 | 1340CST | 0 | 0 | | Hail (0.75) |
| Marquette County | | | | | | |
| Montello | 14 | 1350CST | 0 | 0 | | Thunderstorm Wind (G52) |
| Columbia County | | | | | | |
| 4 N Pardeeville | 14 | 1420CST | 0 | 0 | | Thunderstorm Wind (G52) |
| Columbia County | | | | | | |
| 3 W Arlington | 14 | 1450CST | 0 | 0 | | Thunderstorm Wind (G52) |
| Green County | | | | | | |
| Countywide | 14 | 1450CST 1525CST | 0 | 0 | | Thunderstorm Wind (G52) |
| D C 4 | | 1323CS1 | | | | |
| Dane County Middleton | 14 | 1458CST | 0 | 0 | | E |
| | 14 | 1456CS1 | U | U | | Funnel Cloud |
| Columbia County | 1.4 | 1500CCT | 0 | 0 | 1517 | **** |
| 1 E Poynette | 14 | 1500CST | 0 | 0 | 15K | Lightning |





| Location | Date | Time Local/ Standard | Path Length (Miles) | Path Width (Yards) | Numl Per Killed | oer of sons Injured | Estimated Damage Property Crops | June 2001 Character of Storm |
|-----------------------------------|--------|----------------------------|---------------------------|--------------------------|-----------------------|---------------------------|---------------------------------------|---------------------------------------|
| WISCONSIN, South | | Standard | (Willes) | (Talus) | Killed | Injured | Froperty Crops | Character of Storin |
| | east | | | | | | | |
| Dane County Madison | 14 | 1500CST | | | 0 | 0 | | Thunderstorm Wind (G52) |
| Dane County Madison | 14 | 1510CST 1700CST | | | 0 | 0 | | Urban/Sml Stream Fld |
| Lafayette County Shullsburg | 14 | 1840CST | | | 0 | 0 | | Thunderstorm Wind (G52) |
| Green County 4 SW Monroe | 14 | 1900CST | | | 0 | 0 | | Thunderstorm Wind (G52) |
| Green County New Glarus | 14 | 1915CST | | | 0 | 0 | | Thunderstorm Wind (G52) |
| Rock County 5 W Janesville | 14 | 1915CST | | | 0 | 0 | | Thunderstorm Wind (G52) |
| Walworth County 2.5 NW Delavan | 14 | 1935CST | | | 0 | 0 | | Thunderstorm Wind $(G54)^M$ |
| | Scotto | rad chart lines or | clusters of se | wara thunda | retorme wi | th large h | ail and nowarful dan | paging etraight line down hurst winds |

Scattered short lines or clusters of severe thunderstorms, with large hail and powerful, damaging, straight-line, down-burst winds affected parts of south-central and southeast Wisconsin. There were many reports of toppled large trees. Lightning struck a home east of Poynette, resulting in some fire damage to the roof and attic. Torrential rains accompanied the severe storms. Minor urban and small stream flooding was reported in and near Madison (Dane Co.). Spotters in the Madison area noted that rain totals were in the 1 to 2 inch range in one hour.

Synoptically, a low pressure moved northeast along a cold front that stretched from Iowa through Minnesota. A plume of low-level moisture pushed into southern Wisconsin. Maximum daytime temperatures on the 14th were in the upper 80s to lower 90s, with surface dewpoints in the upper 60s to lower 70s. Training of thunderstorm cells enhanced the rainfall totals over Dane County.

| Marquette County Montello | 16 | 1815CST | 0 | 0 | | Thunderstorm Wind (G56) |
|--|----|--------------------|---|---|-----|-------------------------|
| Marquette County 5 N Westfield to Neshkoro | 16 | 1820CST 1830CST | 0 | 0 | | Thunderstorm Wind (G52) |
| Dodge County 7 W Waupun to Waupun | 16 | 1826CST | 0 | 0 | | Thunderstorm Wind (G56) |
| Columbia County 7 ESE Wisconsin Dells to Dekorra | 16 | 1830CST 1840CST | 0 | 0 | | Thunderstorm Wind (G52) |
| Green Lake County 1.5 SW Marquette to Green Lake | 16 | 1830CST 1840CST | 0 | 0 | 10K | Thunderstorm Wind (G52) |
| Fond Du Lac County Alto to Waupun | 16 | 1845CST 1850CST | 0 | 0 | | Thunderstorm Wind (G52) |
| Dodge County Beaver Dam | 16 | 1910CST | 0 | 0 | | Thunderstorm Wind (G52) |
| Fond Du Lac County Campbellsport | 16 | 1910CST | 0 | 0 | | Thunderstorm Wind (G52) |
| Sheboygan County 2 S Sheboygan Falls | 16 | 1930CST | 0 | 0 | | Thunderstorm Wind (G52) |



West Allis

Milwaukee County

0115CST

18

National Weather Service Storm Data and Unusual Weather Phenomena



June 2001 Path Length (Miles) Time Local/ Path Width Number of Persons Estimated Damage

WISCONSIN, Southeast

| Washington County | 17 | 1024CST | • | 0 | | TI 1 4 WY 1/050 | | | | |
|--|--|--------------------|---|---|------|-----------------------------|--|--|--|--|
| 4 NE West Bend | 16 1936CST 0 0 Thunderstorm Wind (G52) Scattered severe thunderstorms, with powerful, straight-line, down-burst winds, affected parts of south-central and southeast Wisconsin. There were many reports of large trees pushed over by the winds. In Green Lake County, a larg tree fell on, and slightly damaged, a bar/restaurant near the village of Marquette, and a pontoon boat was flipped over on Green Lake. | | | | | | | | | |
| Iowa County .7 E Mifflan | 17 | 1902CST | 0 | 0 | 100K | Lightning | | | | |
| Iowa County 2.8 NE Mifflan | 17 | 1910CST | 0 | 0 | 100K | Lightning | | | | |
| Sauk County Baraboo to Lake Delton | 17 | 2030CST 2035CST | 0 | 0 | | Hail (1.00) | | | | |
| Sauk County Baraboo to Lake Delton | 17 | 2040CST 2300CST | 0 | 0 | | Urban/Sml Stream Fld | | | | |
| Columbia County Portage | 17 | 2045CST 2300CST | 0 | 0 | | Urban/Sml Stream Fld | | | | |
| Sauk County 6 SE Baraboo | 17 | 2050CST | 0 | 0 | | Hail (1.00) | | | | |
| Sauk County Reedsburg to Baraboo | 17 | 2057CST 2105CST | 0 | 1 | | Thunderstorm Wind $(G54)^M$ | | | | |
| Columbia County 8 SE Portage | 17 | 2228CST | 0 | 0 | | Hail (1.75) | | | | |
| Columbia County Pardeeville | 17 | 2321CST | 0 | 0 | | Hail (1.00) | | | | |
| Dodge County Randolph | 17 | 2350CST | 0 | 0 | | Thunderstorm Wind (G52) | | | | |
| Dodge County Randolph to Fox Lake | 18 | 0000CST 0300CST | 0 | 0 | | Urban/Sml Stream Fld | | | | |
| Dodge County 5 S Beaver Dam to Juneau | 18 | 0009CST 0015CST | 0 | 0 | | Hail (0.75) | | | | |
| Waukesha County Stonebank | 18 | 0047CST | 0 | 0 | | Hail (0.88) | | | | |
| Washington County 1 S Slinger to Jackson | 18 | 0100CST | 0 | 0 | | Thunderstorm Wind (G52) | | | | |
| Waukesha County Sussex | 18 | 0100CST | 0 | 0 | | Hail (1.00) | | | | |

Scattered severe thunderstorms, with large hail and damaging, straight-line, down-burst winds, affected parts of south-central and southeast Wisconsin. There were many reports of toppled trees, and hail stones reached golf-ball size (1.75 inches in diameter) southeast of Portage (Columbia Co.). One person was injured between Reedsburg and Baraboo when a wind-toppled tree fell on their car. Torrential rains accompanied some of the storms, resulting in urban and small stream flooding in and around Randolph and Fox Lake in northwest Dodge County. Three-fourths of an inch of rain fell in 25 minutes in Randolph and up to 2 inches fell around Fox Lake. Up to 1.80 inches of rain fell in a short period of time in the Baraboo to Lake Delton area of Sauk County, resulting in urban and small stream flooding in that county. Water depths affected roads in northeast Sauk and northwest Dodge Counties where it was reported to be 6 inches to 2 feet deep. Lightning-initiated fires destroyed two barns on separate farms near

Hail (0.88)





| | | Time | Path | Path Width | Numbe | | | nated | | June 2001 |
|----------|------|----------|-------------------|---------------|--------|---------|----------|-------|--------------------|-----------|
| Location | Doto | Local/ | Length (Miles) | (Yards) | Perso | | | | Character of Storm | |
| Location | Date | Standard | (Milles) | (Tarus) | Killed | Injured | Property | Crops | Character of Storm | |

WISCONSIN, Southeast

Mifflan (Iowa Co.).

Synoptically, an upper-level, short-wave trough moved through the Great Lakes region. Instability along the trough was sufficient to allow thunderstorm development. The thunderstorm cells moved southeastward.

| Fond Du Lac Fond Du Lac | 18 | 1530CS' 1540CS' | | | 0 | 0 | 25K | | Li | ghtning | g |
|-------------------------|----------|--------------------|-------------------|-------------|---------------|--------|---------|----------|---------|---------|----|
| | Intense, | frequent | lightning strikes | accompanied | thunderstorms | moving | through | the city | of Fond | du Lac. | Se |

Intense, frequent lightning strikes accompanied thunderstorms moving through the city of Fond du Lac. Several power poles and lines were downed by the lightning strikes.

| Sheboygan County Cedar Grove | 30 | 1600CST | 0 | 0 | Thunderstorm Wind (G52) |
|-----------------------------------|----|---------|---|---|-------------------------|
| Jefferson County Waterloo | 30 | 1813CST | 0 | 0 | Hail (0.75) |
| Jefferson County Johnson Creek | 30 | 1845CST | 0 | 0 | Thunderstorm Wind (G52) |
| Racine County 2 E Wind Pt | 30 | 1925CST | 0 | 0 | Waterspout |

Severe thunderstorms affected parts of southeast Wisconsin with large hail and damaging, straight-line, down-burst winds. In addition, a brief waterspout was noted near Wind Point (Racine Co.). Large trees were toppled by powerful thunderstorm winds in Cedar Grove (Sheboygan Co.), and near Johnson Creek in Jefferson County. Synoptically, thunderstorms fired up along a cold front and pre-frontal trough punching southeast through Wisconsin. Surface dewpoints ahead of the front were in the lower 70s. Maximum daytime temperatures were in the mid to upper 80s. Cell movement was to the east/southeast.